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IBM Corporation T81/503			ADTIDUT	DARED SWIMPED	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/755,351	CUOMO ET AL.			
Office Action Summary	Examin r	Art Unit			
	Aaron Perez-Daple	2121			
The MAILING DATE of this communication appears on the cov r sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	66(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	ely filed will be considered timely. the mailing date of this communication. 0 (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>05 January 2001</u> .					
2a) This action is FINAL . 2b) ⊠ This	This action is FINAL . 2b)⊠ This action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-37 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-37 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or					
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the option of o	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is objected	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary (Paper No(s)/Mail Dat 5) Notice of Informal Pa 6) Other:	e			

DETAILED ACTION

- 1. This Action is in response to Application filed 1/05/01, which has been fully considered.
- 2. Claims 1-37 are presented for examination.
- 3. This Action is non-Final.

Claim Objections

- 4. Claim 6 is objected to because of the following informalities: line 6 recites "represent" where it should recite --present--. Any further recitations of "represent" in dependent claims 7-12 are objected to under the same basis. Appropriate correction is required.
- 5. Claim 18 is objected to because of the following informalities: line 10 recites "represent" where it should recite --present--. Line 5 recites "as" where it should recite --a--. Appropriate correction is required.
- 6. Claim 19 is objected to because of the following informalities: line 7 recites "add" where it should recite --adds--. Appropriate correction is required.
- 7. Claim 29 is objected to because of the following informalities: line 6 recites "represent" where it should recite --present--. Any further recitations of "represent" in dependent claims 30-35 are objected to under the same basis. Appropriate correction is required.
- 8. Claim 37 is objected to because of the following informalities: line 7 recites "represent" where it should recite --present--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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10. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, it is not clear what "the data processing system" of line 2 refers to.

The Examiner interprets that the "data processing system" recited in claim 1 encompasses the entire claimed system (as recited, the system includes at least a client, a server and an authentication node). Applicant should clarify which specific elements are identified in the information. For the purpose of applying prior art, the Examiner finds that information for identification of any of the system elements is sufficient to teach the limitation of the claim.

- 11. Claims 6-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, it appears that line 3 of claim 6 should recite -- receiving a request at a server-- rather than "receiving a request from a server," especially since the limitation further recites that the request "is originated by a client." As currently recited, the client and the server would appear to be the same device, which is contrary to the invention disclosed in the specification. This interpretation is further supported by dependent claim 7 which recites, "wherein the request is originated by a user at the client." Therefore, the Examiner interprets that Applicant intends for the request to originate from a client, which interpretation will be used in applying prior art.
- 12. As for claim 9, it is not clear what server "the server" in line 2 refers to. Presumably, based on the interpretation of claim 6 above, "the server" should refer to the server receiving the request. Thus, it is not clear if Applicant intends to claim information for identification of the receiving server or information for identification of the client. For the purpose of

applying prior art, the Examiner finds that either interpretation meets the limitation of the claim.

- 13. As dependent claims, claims 7-12 are subject to the same deficiencies as claim 6.
- 14. Claims 13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, lines 9-12 of claim 13 are almost incomprehensible. The Examiner interprets that the limitation "add information... a modified request" on lines 9-11 should recite --wherein the processing unit adds information to the request in which the information indicates that it is from a trusted source to form a modified request--. The limitation of lines 11-12, "wherein the information... that the request" will be ignored. The claim should further be modified to clarify that the steps of performing, adding, and sending are performed by the processing unit. As presently recited, the limitations are separate method steps unconnected to the claimed apparatus.
- 15. As dependent claims, claims 14-17 are subject to the same deficiencies as claim 13.
- 16. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, it appears that line 8 should recite --to receive a request at a server-- rather than "to receive a request from a server," especially since the limitation further recites that the request "is originated by a client." As currently recited, the client and the server would appear to be the same device, which is contrary to the invention disclosed in the specification. For the purpose of applying prior art, the Examiner will use

the above interpretation. The claim should further be modified to clarify that the steps of determining and processing are performed by the processing unit.

- 17. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, it is not clear what "the data processing system" of lines 2-3 refers to. The Examiner interprets that the "data processing system" recited in claim 24 encompasses the entire claimed system. Applicant should clarify which specific elements are identified in the information. For the purpose of applying prior art, the Examiner finds that information for identification of any of the system elements is sufficient to teach the limitation of the claim.
- 18. Claim 29-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, it appears that lines 3-4 should recite --to receive a request at a server-- rather than "to receive a request from a server," especially since the limitation further recites that the request "is originated by a client." As currently recited, the client and the server would appear to be the same device, which is contrary to the invention disclosed in the specification. For the purpose of applying prior art, the Examiner will use the above interpretation.
- As for claim 32, it is not clear what server "the server" in line 2 refers to. Presumably, based on the interpretation of claim 6 above, "the server" should refer to the server receiving the request. Thus, it is not clear if Applicant intends to claim information for identification of the receiving server or information for identification of the client. For the purpose of

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applying prior art, the Examiner finds that either interpretation meets the limitation of the claim.

- 20. As dependent claims, claims 30-35 suffer from the same deficiencies as claim 29.
- 21. Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, lines 8-11 of the claim are convoluted. The Examiner interprets that the limitation of lines 8-11 should recite --third instructions for adding information to the request to form a modified request, wherein the information indicates that the request is from a trusted source--.

Claim Rejections - 35 USC § 102

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 23. Claims 1-14, 17-19 and 21-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Abdelnur et al. (US 6,212,640 B1) (hereinafter Abdelnur).
- 24. As for claim 1, Abdelnur discloses a method in a data processing system for authenticating a request, the method comprising:

receiving a request from a client (step 510, Fig. 5; col. 10, lines 56-59, "At step 510...by client 430.");

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performing authentication of the request (step 610, Fig. 6; col. 11, lines 47-52, "At step 610...application, for example.");

adding information to the request to form a modified request, wherein the information indicates that the request is from a trusted source (col. 12, lines 7-19, "In one or more... submitting false credentials."); and

sending the modified request to a server (step 620, Fig. 6; col. 11, lines 57-63, "However, if the authorization... access its resources.").

- 25. As for claim 2, Abdelnur discloses the method of claim 1, wherein the request is a request to access data (col. 11, lines 47-52, "At step 610...application, for example.").
- 26. As for claim 3, Abdelnur discloses the method of claim 1, wherein the data processing system is a reverse proxy server (web server 480 inherently acts as a reverse proxy server in the disclosed embodiment; col. 11, lines 38-42, "Alternatively, if servlet... and server 460.").
- 27. As for claim 4, Abdelnur discloses the method of claim 1, wherein the information includes a user identification (col. 12, lines 7-19, "In one or more...submitting false credentials.").
- 28. As for claim 5, Abdelnur discloses the method of claim 1, wherein the information includes an identification of the data processing system (col. 12, lines 7-19, "In one or more... submitting false credentials.").
- 29. As for claim 6, Abdelnur discloses a method in a data processing system for processing a request (see col. 10, line 54 col. 12, line 19, "Fig. 5 is...false credentials."), the method comprising:

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receiving a request from a server, wherein the request is originated by a client (step 510, Fig. 5; col. 10, lines 56-59, "At step 510...by client 430.");

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determining whether selected information is represent in the request (step 520, Fig. 5); and

responsive to the selected information being present in the request, processing the request (steps 530 and 535, Fig. 5).

30. As for claim 7, Abdelnur discloses the method of claim 6, wherein the request is originated by a user at the client and wherein the request requests access to a resource and wherein the processing step comprises:

determining whether the user is authorized to access to the resource (step 520, Fig. 5); and

responsive to a determination that the user is authorized, accessing the resource using the request (steps 530 and 535, Fig. 5).

- 31. As for claim 8, Abdelnur discloses the method of claim 6, wherein the server is a reverse proxy server (web server 480 inherently acts as a reverse proxy server in the disclosed embodiment; col. 11, lines 38-42, "Alternatively, if servlet... and server 460.").
- 32. As for claim 9, Abdelnur discloses the method of claim 6, wherein the information is an identification of the server (col. 9, lines 60-64, "Authentication involves... between the two.").
- 33. As for claim 10, Abdelnur discloses the method of claim 6, wherein the information is a user name and password (col. 9, lines 60-64, "Authentication involves... between the two.").

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34. As for claim 11, Abdelnur discloses the method of claim 6, wherein the selected information is a presence of a value within a preselected location in the request (col. 9, lines 60-64, "Authentication involves...between the two.").

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- 35. As for claim 12, Abdelnur discloses the method of claim 6, wherein the determining step is executed using a set of interceptors (interceptors are inherent for intercepting the request for authentication; col. 11, lines 12-22, "Web server 480...to network 450."; col. 12, lines 7-19, "In one or more embodiments... submitting false credentials.").
- As for claim 13, Abdelnur discloses a data processing system comprising:

 a bus system (Fig. 7; col. 12, lines 28-55, "An embodiment of... and address lines.");

 a communications unit connected to the bus system (COMM INT 720, Fig. 7);

 a memory connected to the bus system, wherein the memory includes as set of instructions (main memory 715, mass storage 712, Fig. 7); and

a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to receive a request from a client (step 510, Fig. 5; col. 10, lines 56-59, "At step 510...by client 430."); perform authentication of the request (step 610, Fig. 6; col. 11, lines 47-52, "At step 610...application, for example."); add information to the request is from a trusted source to form a modified request (col. 12, lines 7-19, "In one or more...submitting false credentials."), wherein the information indicates that the request; and send the modified request to a server (step 620, Fig. 6; col. 11, lines 57-63, "However, if the authorization...access its resources.").

- 37. As for claim 14, Abdelnur discloses the data processing system of claim 13, wherein the bus system is a single bus (bus 718, Fig. 1; col. 12, lines 50-55, "The system bus...and address lines.").
- 38. As for claim 17, Abdelnur discloses the data processing system of claim 13, wherein the communications unit is one of a modem and Ethernet adapter (col. 13, lines 5-19, "Computer 700 may...types of information.").
- 39. As for claim 18, Abdelnur discloses data processing system comprising:

 a bus system (Fig. 7; col. 12, lines 28-55, "An embodiment of... and address lines.");

 a communications unit connected to the bus system (COMM INT 720, Fig. 7);

 a memory connected to the bus system, wherein the memory includes as set of instructions (main memory 715, mass storage 712, Fig. 7); and
 - a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to receive a request from a server, wherein the request is originated by a client (step 510, Fig. 5; col. 10, lines 56-59, "At step 510...by client 430."); determine whether selected information is represent in the request (step 520, Fig. 5); and process the request, in response to the selected information being present in the request (steps 530 and 535, Fig. 5).
- 40. As for claim 19, Abdelnur discloses a network data processing system comprising: a network (Fig. 4);
 - a plurality of clients connected to the network (client 430, Fig. 4; Client 430 is exemplary. It is understood that clients may be plural. See col. 1, lines 26-34, "In computer networks...via the Internet.");

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a first server connected to the network, wherein the first server receives a request from a client to access a resource, performs an authentication process with the client, add information to the request in which the information indicates that the request is from a trusted source to form a modified request, and sends the modified request for processing (web server 480, Fig. 4; Fig. 6; col. 11, line 47 - col. 12, line 6, "At step 610...access rights."); and a second server connected to the network, wherein the second server receives the modified request from a first server, determines whether the first server is a trusted server based on the information, and provides access to the resource in response to a determination that the first server is a trusted server (server 460, Fig. 4; col. 11, line 53 - col. 12, line 20, "If application 410...false credentials.").

- 41. As for claim 21, Abdelnur discloses the network data processing system of claim 19, wherein the network is at least one of a local area network, an intranet, an extranet and an Internet (col. 1, line 63 col. 2, line 6, "In modem computing environments... may be communicated.").
- 42. As for claim 22, Abdelnur discloses the network data processing system of claim 19, wherein the second server includes a set of interceptors in which the set of interceptors are used to determine whether the first server is a trusted server, wherein the request is sent to each of the set of interceptors to determine whether the interceptors can handle the request (interceptors are inherent for intercepting the request for authentication; col. 11, lines 12-22, "Web server 480... to network 450."; col. 12, lines 7-19, "In one or more embodiments... submitting false credentials.").

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43. As for claim 23, Abdelnur discloses the network data processing system of claim 19, wherein the second server receives the request directly from the client (step 510, Fig. 5).

44. As for claim 24, Abdelnur discloses a data processing system for authenticating a request, the data processing system comprising:

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receiving means for receiving a request from a client (inherent to web server 480, Fig. 4; col. 11, lines 23-33, "Requests submitted by application...locate servlet 490.");

performing means for performing authentication of the request (col. 11, lines 47-63, "At step 610...access its resources.");

adding means for adding information to the request to form a modified request, wherein the information indicates that the request is from a trusted source (col. 12, lines 7-20, "In one or more embodiments...submitting false credentials."); and

sending means for sending the modified request to a server (inherent to web server 480, Fig. 4; step 620, Fig. 6).

- As for claim 25, Abdelnur discloses the data processing system of claim 24, wherein the request is a request to access data (col. 11, lines 47-52, "At step 610...application, for example.").
- As for claim 26, Abdelnur discloses the data processing system of claim 24, wherein the data processing system is a reverse proxy server (web server 480 inherently acts as a reverse proxy server in the disclosed embodiment; col. 11, lines 38-42, "Alternatively, if servlet... and server 460.").

47. As for claim 27, Abdelnur discloses the data processing system of claim 24, wherein the information includes a user identification (col. 12, lines 7-19, "In one or more... submitting false credentials.").

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- 48. As for claim 28, Abdelnur discloses the data processing system of claim 24, wherein the information includes an identification of the data processing system (col. 12, lines 7-19, "In one or more... submitting false credentials.").
- 49. As for claim 29, Abdelnur discloses a data processing system for processing a request, the data processing system comprising:

receiving means for receiving a request from a server, wherein the request is originated by a client (inherent to web server 480, Fig. 4; col. 11, lines 23-33, "Requests submitted by application...locate servlet 490.");

determining means for determining whether selected information is represent in the request (col. 11, lines 47-63, "At step 610...access its resources."); and processing means for processing the request in response to the selected information being present in the request (col. 11, lines 47-65, "If application 410...from server 460.").

As for claim 30, Abdelnur discloses the data processing system of claim 29, wherein the determining means is a first determining means and wherein the request is originated by a user at the client and wherein the request requests access to a resource and wherein the processing step comprises:

second determining means for determining whether the user is authorized to access to the resource (inherent to server 460, Fig. 4; col. 11, lines 12-22, "Web server 480...to network 450."; col. 12, lines 7-20, "In one or more...false credentials."); and

accessing means for accessing the resource using the request in response to a determination that the user is authorized (col. 11, line 64 - col. 12, line 6, "Once the request...access rights.").

- As for claim 31, Abdelnur discloses the data processing system of claim 29, wherein the server is a reverse proxy server (web server 480 inherently acts as a reverse proxy server in the disclosed embodiment; col. 11, lines 38-42, "Alternatively, if servlet...and server 460.").
- 52. As for claim 32, Abdelnur discloses the data processing system of claim 29, wherein the information is an identification of the server (col. 9, lines 60-64, "Authentication involves... between the two.").
- As for claim 33, Abdelnur discloses the data processing system of claim 29, wherein the information is a user name and password (col. 9, lines 60-64, "Authentication involves... between the two.").
- 54. As for claim 34, Abdelnur discloses the data processing system of claim 29, wherein the selected information is a presence of a value within a preselected location in the request (col. 9, lines 60-64, "Authentication involves... between the two.").
- As for claim 35, Abdelnur discloses the data processing system of claim 29, wherein the determining means includes a set of interceptors (interceptors are inherent for intercepting the request for authentication; col. 11, lines 12-22, "Web server 480...to network 450."; col. 12, lines 7-19, "In one or more embodiments...submitting false credentials.").
- As for claim 36, Abdelnur discloses a computer program product in a computer readable medium for authenticating a request, the computer program product comprising:

 first instructions for receiving a request from a client (steps 540-580, Fig. 5);

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second instructions for performing authentication of the request (step 610, Fig. 6); third instructions for adding information to the request is from a trusted source to form a modified request, wherein the information indicates that the request (col. 11, lines 12-22, "Web server 480...to network 450."; col. 12, lines 7-19, "In one or more embodiments...submitting false credentials."); and

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fourth instructions for sending the modified request to a server (step 620, Fig. 6).

57. As for claim 37, Abdelnur discloses a computer program product in a computer readable medium for processing a request, the computer program product comprising:

first instructions for receiving a request from a server, wherein the request is originated by a client (steps 540-580, Fig. 5);

second instructions for determining whether selected information is represent in the request (step 610, Fig. 6); and

third instructions, responsive to the selected information being present in the request, for processing the request (col. 11, lines 47-65, "If application 410... from server 460.").

Claim Rejections - 35 USC § 103

- 58. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 59. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abdelnur in view of Mirashrafi et al. (US 6,212,192 B1) (hereinafter Mirashrafi). Abdelnur does explicitly

disclose a processing unit including a plurality of processors. It is well known in the art that computer systems, especially servers such as those disclosed by Abdelnur, may comprise multiple processors. Mirashrafi explicitly teaches the use of multiple processors in a network server (col. 12, lines 16-36, "Turning now to...control device 638."). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Abdelnur by using a plurality of processors because this would allow for more efficient and timely processing of user requests.

- 60. Claims 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abdelnur.
- As for claim 15, it could be argued that Abdelnur inherently comprises at least primary and secondary buses, however Abdelnur does not explicitly disclose a secondary bus system. "Official Notice" is given that it is both well known and expected in the art to use a secondary bus in data processing systems. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Abdelnur by using a secondary bus because this would allow for interfacing efficiently with multiple networks (for example the external internet and an internal LAN or intranet). See cited references US 6,564,274 B1 and US 6,298,407 B1.
- As for claim 20, Abdelnur does not explicitly disclose a third server for performing essentially the same functions as the first server. However, Abdelnur clearly discloses the invention in the context of a network environment such as the internet coupled with a LAN/WAN, the network comprising multiple servers, clients, back-end resources, etc. (see col. 1, lines 26-55, "In computer networks...via the Internet."; col. 8, lines 28-62, "A method

and apparatus...the requesting application."). Therefore, Abdelnur clearly anticipates the use of additional servers, including a third server, as recited in claim 20. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Abdelnur by adding a third server, wherein the third server receives requests from clients to access a resource, performs an authentication process with the clients, add information to the requests in which the information indicates that the requests are from a trusted source to form modified requests, and sends the modified requests to the second server for processing, because this would provide additional network resources for processing requests.

Conclusion

- 63. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,564,274 B1, note teaches secondary bus; US 6,298,407 B1, note teaches secondary bus; US 6,463,474 B1, note Fig. 3; US 6,363,479 B1,note Fig. 3; US 6,363,478 B1, note cols. 3-4; US 6,317,838 B1, note Fig. 1; US 6,631,417 B1, note Fig. 1; US 6,115,040, note Fig. 5; US 5,968,176, note Fig. 1; US 5,991,810, note Fig. 1; US 6,584,505 B1, note Fig. 1.
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Perez-Daple whose telephone number is 703-305-4897. The examiner can normally be reached on 9am 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anil Khatri can be reached on 703-305-0282. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

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